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## REMARKS

Claims 1-30 remain pending. Claims 10-15 and 27-30 have been withdrawn from consideration.

In the Office Action, the Examiner rejected claims 1-9 and 16-26 under 35 U.S.C. § 102(b) as being anticipated by <u>Liu et al.</u> ("New Fast Algorithms for the Estimation of Block Motion Vectors," <u>IEEE Int'l Symp. on Circuits & Systems</u>, pp. 148-157, April 1993).

Applicant respectfully traverses the § 102(b) rejection of claims 1-9 and 16-26 over Liu et al. Independent claims 1, 16, 19, and 25 require a method, encoder, medium, and system including, inter alia, "determining a set of K candidate blocks B<sub>1</sub>...B<sub>K</sub>, with each block B<sub>i</sub>, for i=1 to K, identified by a pixel in search set S<sub>i</sub> and minimizing a first distortion function relative to the target block; and determining which [one] of the K candidate blocks B<sub>1</sub>...B<sub>K</sub> minimizes a second distortion function relative to the target block." Liu et al. fails to disclose all elements of the claimed method, encoder, medium, and system set forth in claims 1, 16, 19, and 25.

Page 3 of the Office Action alleges that the claimed first distortion function is met by "MAD" (e.g., equation 1 on page 148 of <u>Liu et al.</u>) and somewhat cryptically refers to a "sub-block" with regard to the claimed second distortion function. <u>Liu et al.</u>, however, fails to disclose at least minimizing a second distortion function as set forth in the claims.

Liu et al. only discloses minimization of a single distortion function in equation 2 on page 148. Liu et al. does not disclose, either expressly or inherently, either the existence of a second distortion function, or minimization of such a second distortion function, as required by claims 1, 16, 19, and 25. That Liu et al. discloses sub-block motion-filed estimation on pages 152 and 153 does not cure this lack of a second distortion function. Nor does Liu et al. disclose

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"determining which [one] of the K candidate blocks  $B_1...B_K$  minimizes a second distortion function" for the K candidate blocks for which "minimizing a first distortion function relative to the target block" was performed.

Because <u>Liu et al.</u> fails to disclose all elements of claims 1, 16, 19, and 25, the § 102(b) rejection over <u>Liu et al.</u> is improper and should be withdrawn. Dependent claims 2-9, 17, 18, 20-24, and 26-30 are allowable at least due to their dependence from claims 1, 16, 19, and 25.

Reconsideration and allowance of claims 1-30 are respectfully requested.

In the event that any outstanding matters remain in this application, Applicant requests that the Examiner contact Alan Pedersen-Giles, attorney for Applicant, at the number below to discuss such matters.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0221 and please credit any excess fees to such deposit account.

Respectfully submitted,

Dated: July 27, 2005

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